APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/829,834	04/10/2001	Joseph R. Edwards	ROC920010078US1	1266

		EXAMINER
7590	04/21/2004	ROCHE, TRENTON J

Leslie J. Payne
IBM Corporation-Dept. 917
3605 Highway 52 North
Rochester, MN 55901

ART UNIT	PAPER NUMBER
2124	2

DATE MAILED: 04/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _10 April 2001_.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-14_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-14_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on _10 April 2001_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.   Claims 1-14 have been examined.

Claim Rejections - 35 USC § 112

2.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3.   Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4.   Claim 3 recites the limitation "said ATM information element (IE)" in line 2. There is insufficient antecedent basis for this limitation in the claim. For purposes of examination this will be interpreted to read "an ATM information element (IE)..."

Claim Rejections - 35 USC § 101

5.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-14 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The invention as disclosed in claims 1-14 is directed to non-statutory subject matter. The claimed invention as a whole must accomplish a practical application. That is, it must produce a "useful,

concrete and tangible result." (State Street Bank & Trust Co. v. Signature Financial Group Inc., 149 F.3d at 1373, 47 USPQ2d at 1601-02.)

Specifically, independent claim 1 is directed to a method for parsing and generating data structures by defining length and location parameters in a data structure, further storing or placing the parameters within an identification object in a data structure definition. However, the claims are non-functional descriptive material which merely represent an abstract idea or concept, and do not indicate a certain level of "real world" value or practical application for the claimed invention. Furthermore, the intended functionality of parsing and generating are mere allegations towards functionality, as the claims do not disclose any details pertaining to the parsing and generating of data structures. Thus, Applicants fail to disclose that the claimed functions of utilizing and storing have practical applications which produce useful, concrete, and tangible results under the State Street Formulation.

Similarly, independent claim 10 represents an abstract idea or concept, furthermore, the claimed compiler and platform independent framework are mere allegations towards functionality, as the claims do not disclose any details pertaining to the compiler and platform independent framework.

Equally, independent claim 14 represents an abstract idea or concept, furthermore, the intended functionality of parsing and generating are mere allegations towards functionality, as the claims do not disclose any details pertaining to the parsing and generating of data structures.

Finally, dependent claims 2-9 and 11-13 do not set forth any additional functionality pertaining to the claimed steps in the independent claims, and are rejected for the same reasons.

On this basis, claims 1-14 are rejected under 35 U.S.C. § 101.

Claim Rejections - 35 USC § 102

6.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7.   Claims 1 and 10-14 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent

5,870,749 to Adusumilli.

Regarding claim 1:

Adusumilli teaches:

-   a method for parsing and generating data structures ("automatic generation of data

    structures for use in communicating with devices..." in lines 18-20 of the Abstract)

-   utilizing sizeof and offsetof functions, defining a length and a location of each parameter of

    a data structure ("The CStructureSize field contains the size of the C structure...(the sizeof()

    operator may be used to compute this size... The fieldOffset field is set to the offset of the

    corresponding field in the C structure ...(the offsetof() macro may be used to compute the

    offset of the field)" in col. 11 lines 30-50)

-   storing said length and said location of each said parameter of the data structure within an

    identifier object in a data structure definition ("The CStructureSize field contains the size of

    the C structure...(the sizeof() operator may be used to compute this size... The fieldOffset

    field is set to the offset of the corresponding field in the C structure ...(the offsetof() macro

    may be used to compute the offset of the field)" in col. 11 lines 30-50. The CstructureSize

    and fieldOffset fields are the parameters of the data structure.)

substantially as claimed.

Regarding claim 10:

Adusumilli teaches:

- a compiler and platform independent framework for parsing and generating data structures ("The ASN.1 compiler and GDMO compiler parse the ASN.1 and GDMO definitions and generate meta data that represent the information provided in original source files in a format that is convenient for use by other applications..." in col. 6 lines 5-9)

- means for defining a length and a location of each parameter of a data structure utilizing sizeof and offsetof functions ("The CStructureSize field contains the size of the C structure...(the sizeof() operator may be used to compute this size... The fieldOffset field is set to the offset of the corresponding field in the C structure ...(the offsetof() macro may be used to compute the offset of the field)" in col. 11 lines 30-50)

- means for storing said length and said location of each said parameter of the data structure within an identifier object in a data structure definition ("The CStructureSize field contains the size of the C structure...(the sizeof() operator may be used to compute this size... The fieldOffset field is set to the offset of the corresponding field in the C structure ...(the offsetof() macro may be used to compute the offset of the field)" in col. 11 lines 30-50. The CstructureSize and fieldOffset fields are the parameters of the data structure.)

substantially as claimed.

Regarding claim 11:

The rejection of claim 10 is incorporated, and further, Adusumilli discloses procedural table-driven or object rules-driven methods as claimed (Note at least Figures 3-7 and the corresponding sections of the disclosure.)

Regarding claim 12:

The rejection of claim 10 is incorporated, and further, Adusumilli discloses protocol data units (PDUs) as claimed ("a method for translating CMIP PDUs to/from custom designed data structures..." in col. 2 lines 46-47)

Regarding claim 13:

The rejection of claim 10 is incorporated, and further, Adusumilli discloses control code for writing and reading headers for data storage as claimed ("a method for translating CMIP PDUs to/from custom designed data structures..." in col. 2 lines 46-47. A header is inherently present in the PDU.)

Regarding claim 14:

Adusumilli teaches:

- a computer program product for parsing and generating data structures in a computer system ("automatic generation of data structures for use in communicating with devices..." in lines 18-20 of the Abstract)

- said computer system having a processor, a memory controller coupled to said processor by a system bus, a main memory coupled to said memory controller, said computer program product including a plurality of computer executable instructions stored on a computer readable medium ("A computer disk can be used to store the code implementation of the configuration..." in col. 24 lines 46-47. For the system to generate data structures and use sizeof and offsetof functions, a processor, memory controller and main memory coupled to the memory controller must inherently be present in the system for the functions to execute.)

- utilizing sizeof and offsetof functions, defining a length and a location of each parameter of a data structure ("The CStructureSize field contains the size of the C structure...(the ▮sizeof▮() operator may be used to compute this size... The fieldOffset field is set to the offset of the corresponding field in the C structure ...(the ▮offsetof▮() macro may be used to compute the offset of the field)" in col. 11 lines 30-50)

- storing said length and said location of each said parameter of the data structure within an identifier object in a data structure definition ("The CStructureSize field contains the size of the C structure...(the ▮sizeof▮() operator may be used to compute this size... The fieldOffset field is set to the offset of the corresponding field in the C structure ...(the ▮offsetof▮() macro may be used to compute the offset of the field)" in col. 11 lines 30-50. The CstructureSize and fieldOffset fields are the parameters of the data structure.)

substantially as claimed.

Claim Rejections - 35 USC § 103

8.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9.   Claims 2-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,870,749 to Adusumilli in view of U.S. Patent 6,028,863 to Sasagawa et al, hereafter referred to as Sasagawa.

Regarding claim 2:

The rejection of claim 1 is incorporated, and further, Adusumilli does not disclose the data structure being an ATM information element. Sasagawa discloses in an analogous communication system using PDUs a data structure being an ATM information element (Note figure 32 and the corresponding section of the disclosure). As indicated by Sasagawa, ATM information element data structures were well known at the time the invention was made. It would have been obvious to one of ordinary skill in the art at the time the invention was made to perform the steps of utilizing sizeof and offsetof functions to define a length and location, and storing the length and location in a data structure, the data structure being an ATM information element, as this would allow a user to represent attribute data in a space-efficient manner or in a form suitable for efficient database access, as stated in col. 2 lines 16-22 of Adusumilli.

Regarding claim 3:

The rejection of claim 1 is incorporated, and further, Adusumilli does not disclose an ATM information element being a Connection Identifier. Sasagawa discloses in an analogous communication system using PDUs an ATM information element being a Connection Identifier (Note Figure 43 and the corresponding section of the disclosure). As indicated by Sasagawa, Connection Identifiers were well known at the time the invention was made. It would have been obvious to one of ordinary skill in the art at the time the invention was made to perform the steps of utilizing sizeof and offsetof functions to define a length and location, and storing the length and location in a Connection Identifier, as this would allow a user to represent attribute data in a space-efficient manner or in a form suitable for efficient database access, as stated in col. 2 lines 16-22 of Adusumilli.

Regarding claim 4:

The rejection of claim 3 is incorporated, and further, Adusumilli does not disclose a preferred/exclusive parameter. Sasagawa discloses in an analogous communication system using PDUs a preferred/exclusive parameter ("The invariable indication field 'preferred/exclusive' contains the following 3-bit values" in col. 2 lines 65-67). As indicated by Sasagawa, preferred/exclusive parameters were well known at the time the invention was made. It would have been obvious to one of ordinary skill in the art at the time the invention was made to perform the steps of utilizing sizeof and offsetof functions to define a length and location of a preferred/exclusive parameter, as this would allow a user to represent attribute data in a space-efficient manner or in a form suitable for efficient database access, as stated in col. 2 lines 16-22 of Adusumilli.

Regarding claim 5:

The rejection of claim 3 is incorporated, and further, Adusumilli does not disclose a virtual path connection identifier (VPCI) parameter. Sasagawa discloses in an analogous communication system using PDUs a virtual path connection identifier (VPCI) parameter (Note Figure 3 and the corresponding section of the disclosure). As indicated by Sasagawa, virtual path connection identifier (VPCI) parameters were well known at the time the invention was made. It would have been obvious to one of ordinary skill in the art at the time the invention was made to perform the steps of utilizing sizeof and offsetof functions to define a length and location of a virtual path connection identifier (VPCI) parameter, as this would allow a user to represent attribute data in a space-efficient

manner or in a form suitable for efficient database access, as stated in col. 2 lines 16-22 of

Adusumilli.

Regarding claim 6:

The rejection of claim 3 is incorporated, and further, Adusumilli does not disclose a virtual channel

identifier (VCI) parameter. Sasagawa discloses in an analogous communication system using PDUs a

virtual channel identifier (VCI) parameter (Note Figure 3 and the corresponding section of the

disclosure). As indicated by Sasagawa, virtual channel identifier (VCI) parameters were well known

at the time the invention was made. It would have been obvious to one of ordinary skill in the art at

the time the invention was made to perform the steps of utilizing sizeof and offsetof functions to

define a length and location of a virtual channel identifier (VCI) parameter, as this would allow a

user to represent attribute data in a space-efficient manner or in a form suitable for efficient

database access, as stated in col. 2 lines 16-22 of Adusumilli.

Regarding claim 7:

The rejection of claim 4 is incorporated, and further, Sasagawa discloses storing a

preferred/exclusive parameter in a preferred/exclusive parameter identifier object in a data structure

definition ("The invariable indication field 'preferred/exclusive' contains the following 3-bit values"

in col. 2 lines 65-67. Further, note Figure 3 and the corresponding section of the disclosure.)

Regarding claim 8:

The rejection of claim 5 is incorporated, and further, Sasagawa discloses storing a virtual path

connection identifier (VPCI) parameter in a virtual path connection identifier (VPCI) parameter

identifier object in a data structure definition (Note Figure 3 and the corresponding section of the disclosure.)

Regarding claim 9:

The rejection of claim 6 is incorporated, and further, Sasagawa discloses storing a virtual channel identifier (VCI) parameter in a virtual channel identifier (VCI) parameter identifier object in a data structure definition (Note Figure 3 and the corresponding section of the disclosure.)

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trent J Roche whose telephone number is (703)305-4627. The examiner can normally be reached on Monday - Friday, 9:00 am - 6:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (703)305-9662. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Trent J Roche
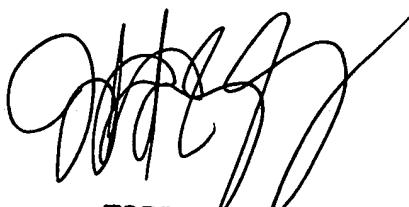Examiner
Art Unit 2124

TJR

TODD INGBERG
PRIMARY EXAMINER